

Rebuild Hawaii Consortium Meeting
August 22, 2006
HEI Training Room, 8th floor
American Savings Bank Building, Alakea and S. King Sts.
Honolulu, Hawaii

Notes

*You can find copies of these notes and presentations on the Internet at
<http://www.rebuildhawaii.us>*

Attendees are listed on the final page.

WELCOME AND INTRODUCTIONS

Jim Maskrey, President, welcomed the group and recognized the signing into law of several energy-related bills. He said that with higher energy prices, there will be more activity in the utilities DSM incentive programs, and interest in renewables and photovoltaics as well as biofuels is rising. Also, there is increased interest in biofuels, with ethanol being proposed as a power plant as well as transportation fuel.

He mentioned the new trade alliance initiative—Hawaii Energy Alliance. He reminded the Consortium that its value in networking and information sharing continues to be recognized and welcomed the new faces at this meeting.

New affiliates Hartson Doak, Island Pacific Academy, and Bill Short, AM-PRES Corporation, were introduced and gave brief presentations on their organizations.

PRESENTATIONS

Steve Meder, University of Hawaii: *Sea Level Rise.*

Meder pointed out that “Business as usual is bringing the downside of the future closer—faster.” His summary of information and graphics on climate change shows that about 50% of carbon emissions are from the built environment. One interesting graphic showed the impact of sea level rise over the next century on the Honolulu airport reef runway. He says that while efforts to encourage the adoption of LEED certification for buildings are commendable, sometimes to quality for additional points, you need to use more energy. He recommends looking at the impact of emissions reduction and energy savings instead.

Jeff Mikulina, Sierra Club: *Lose Weight Today—Go on an energy diet!:*

Mikulina says that carbon dioxide (CO₂) is an everyday issue in Hawaii. People produce 18 tons of this pollutant per year simply through personal actions. In order to reduce energy consumption which produces the CO₂, he recommends replacing incandescent light bulbs with compact fluorescents, biking, taking the bus or telecommuting 3 days a week, solar water heating, switching to a hybrid vehicle, and using a clothesline instead of a clothes dryer.

Miles Kubo, Energy Industries: *Financing Energy Projects.*

Kubo’s message is to invest in energy efficient projects through leasing opportunities which will avoid up-front capital costs, pay for equipment through energy savings, and even provide

additional cash flow from savings, if structured appropriately. Kubo described financial terms such as payback, discounted cash flow, internal rate of return and net present value, as metrics that help owners decide whether or not to undertake a leasing project.

Trini Abaya-Wright, Auto and Equipment Leasing Company: *Municipal Leasing.*

Abaya discussed the differences between a true lease and a tax-exempt (municipal lease). Tax exempt leases can finance energy equipment and upgrades, solar electric systems, lighting and HVAC retrofits or any “essential use” public purpose project.

Bill Brooks, Ferraro Choi: *Comparative Case Studies on Green Buildings in Hawaii.*

Brooks gave a summary on the cost/benefit analysis of green vs. conventional construction being prepared under a contract with DBEDT for an *Analysis of economic, environmental, and occupant benefits of sustainable design and LEED certification for State of Hawaii and K-12 public school facilities*. Study tasks include:

- Establish a base case DOE elementary school
- Establish a base case for a green elementary school
- Compare the base case school to green school to analyze costs and benefits
- Survey 12 existing sustainable schools to corroborate results.

Results of the analysis to date show that green schools cost \$4 more per square foot than conventional classrooms. The largest savings are from HVAC (60%) and lighting (34%). Of the 12 schools surveyed, daylighting was the primary strategy to reduce operating costs. Over 75% of spaces are daylit. Increased up-front costs are perceived to be exceeded by operational savings. The overall perception is that achieving sustainable schools is more a product of best practices than more money.

The project team includes Ferraro Choi, Lincoln Scott, Inc., RMI/ENSAR, and O’Brien & Co. The team works closely with a Review Committee/Working Group from DBEDT, DOE, DAGS, HECO, UH, and Punahou School.

Glenn Sato, County of Kauai: *Update on Niihau PV and PMRF CHP Projects, Kauai.*

Sato reviewed the findings to date for the economic and technical feasibility study of using methane gas from the Kauai Landfill to fuel cogeneration units at the Pacific Missile Range Facility. Findings indicate that gas production could be about 1.1 MW based on the current landfill resource. The Niihau Project to install PV at the Niihau elementary school is a project funded by the USDA Rural Development Program, the County of Kauai and the Department of Education. The project is moving slowly due to site and logistics problems; major issues include bonding and risk of a barge landing of the equipment.

James Brown, HECO: *Hawaii Energy Alliance—a trade ally initiative.*

Brown described a new HECO initiative whose mission is to create and maintain a spirit of cooperation between HECO and its energy industry trade allies to maximize delivery of energy efficient products and services to the marketplace. The Alliance is conducting a campaign of education, public awareness, and industry training, so that energy efficiency will become the benchmark by which all energy related products and services are measured in Hawaii. It has published a Directory of energy products and services.

David Kaahaaina, Skylights of Hawaii: *LowE Glazing Applications in Hawaii.*

Frank Kingery, Rebuild Coordinator, reminded the Consortium that the Coordinator program's purpose is to enhance the efficient use of energy by Rebuild partners, primarily through facilitating access to technical assistance and financial resources. Current focus is on state facilities and projects include:

- Hawaii Air National Guard compressor system upgrade
- Hawaii Public Housing Authority energy savings performance contract

Laura Noda, High Technology Development Corporation (HTDC) announced a series of energy efficiency workshops which the HTDC is planning to hold.

Tom Brennan, Ecolite: *Cold Cathode Lighting*. Brennan provided a hands-on demonstration of this type of lighting which use technology like neon signs, have a longer life than CFLs, and are dimmable, cool, and low cost.

The Rebuild Hawaii Consortium shares information about new products, practices and services, but does not promote or endorse products or vendors.

Attendees

AM President Co.—Bill Short

Auto & Equipment Leasing Company of Hawaii, Trini-Abaya Wright

Bank of Hawaii—Jay Kwock

Chamber of Commerce of Hawaii—Jim Maskrey

City & County of Honolulu--Allyn Lee

County of Hawaii—Bob Arrigoni

County of Kauai—Glenn Sato

Department of Business, Economic Development & Tourism (DBEDT)-- Liz Raman,
Howard Wiig

Department of Defense-Hawaii Army National Guard—Geoffrey Lau

Department of Education— Nick Nichols, Brenda Lowrey, Sucuma Elliot

Department of Health Services—Conroy Chow

Department of Transportation-Harbors—Jonathan Yee

Eco-Lite— Tom Brennan

Energy Industries—Miles Kubo, Karen Leifheit

Ferraro Choi—Bill Brooks

Hawaiian Electric Company, Inc. (HECO) —Jim Maskrey, James Brown, Steve Chang, Dean
Oshiro, Kaiulani DeSilva, Diane Filibeck, Lily Koo, Sam Nichols

Illuminating Engineers Society—Howard Wiig

High Technology Development Center—Laura Noda

Inter-Island Solar Supply—Cully Judd

Island Pacific Academy—Hartson Doak

Kauai Island Utility Cooperative—Jeff Deren

LU, Shaoqian

Malama Learning Center—Paula Nagao

Scheibert Energy Company—Lourdes Scheibert, Todd Scheibert

Skylights of Hawaii—David Kaahaaina

Tetra Tech, Inc.--Frank Kingery

U.S. Air Force—Tom Van Liew

U.S. Coast Guard—Glen Yanagi

U.S. Marine Corps--**Bill Nutting**, John Dunbar

U.S. Navy

NAVFACHAWAII—Kendall Kam

University of Hawaii-School of Architecture—Stephen Meder

University of Hawaii-Travel Industry Management—Ivo Martinac